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SOME NEW NORTH AMERICAN MUSCOID FORMS

By CHARLES H. T. TOWNSEND

A few forms of muscoid flies, mostly of direct economic importance, are characterized below. All are from the eastern and southern United States, one occurring in Cuba.

Juriniopsis, new genus.

Genotype, Juriniopsis floridensis Townsend, new name for Musca hystrix Williston (nec Fabricius) p.p., 1886, Trans. Am. Ent. Soc., XIII, 299, Florida. Holotype, No. 20307 U. S. Nat. Mus., female; TD1187, Miami, Fla. (Det. Coqt. as Jurinia adusta).

This form may be recognized by the following structural characters: Eyes bare. Male with two rows of frontal bristles, and with reclinate fronto-orbitals. Female with one row of frontals, and both proclinate and reclinate fronto-orbitals. Third antennal joint hardly as long as second. First aristal joint not elongate. No discal macrochætæ on intermediate abdominal segments; male with marginal row of second segment normally complete, female with same interrupted laterally; marginal rows very thickly set; anal segment covered with spines that are nearly as heavy. Female front tarsi greatly widened.

Owing to the fact that a number of closely similar forms exist in the eastern and southeastern United States, it is impossible to identify this species with any of the various superficial descriptions of Drury, Desvoidy, Macquart, or Jaennicke. Williston was the first to describe the form by recognizable

characters. The scutellum and abdomen, especially the latter, are polished rufocastaneous; mesoscutum blackish, subshining, thinly brassy pollinose; wings lightly infuscate, blackish at base.

Okea, new genus.

Genotype, Winthemia okefenokeensis H. E. Smith, 1916, Proc. Ent. Soc. Wash., XVIII, 95, Okefenokee Swamp, Georgia.

Differs from Winthemia as follows: Maîe. Front broader; antennæ longer and more slender, the second joint well elongate. Venter of preanal segment with strongly marked pilose areas; the pile long, thick, and rather coarse. Second to fourth front tarsal joints each widened into oblique transversely elongated pieces, these joints being wider than their length, set obliquely and well separated. Hind tibiæ thickly ciliate, without conspicuous longer bristle in middle. There are normally no median macrochætæ on first two abdominal segments. Hypopygial forceps elongate and narrow.

Female.—Front broader than in the male but narrower than in Winthemia female; antennæ nearly same as in male. Front tarsi broadened, the last joint most distinctly so. Hind tibiæ not ciliate, at most subpectinate with a few bristles of unequal length. Second abdominal segment bears a median marginal pair of macrochætæ.

Ten males and one female of a form congeneric with the genotype received from Don Patricio Cardin, Estacion Exper. Agron. de Cuba, Santiago de las Vegas, Cuba, No. 8129.

Eubiomyia, new genus.

Genotype, Pseudatractocera calosomæ Coqt., 1897, Rev. Tach., 82, resurrected name for Biomyia (Viviania) georgiæ Coqt., 1897, l. c., p.p., Amherst, Massachusetts (not Viviania georgiæ B. B.) Holotype, No. 20202 U. S. Nat. Mus., male, reared by A. F. Burgess from adult Calosoma calidum at Amherst, Massachusetts.

Differs from *Biomyia* as follows: Female vertex about one-half eye-width. Parafacials, parafrontals, and frontalia all

much narrower. Antennæ not so elongate, more narrowed; third joint in both sexes about twice as long as second joint. Fronto-orbital bristles closely crowded against frontal bristles. Face more receding, the lower border of head much shorter. Front in both sexes nearly same width. Female without discal macrochætæ on intermediate abdominal segments, male with small ones. Metatarsi of male swollen, especially hind ones, agreeing in this character with *Pseudatractocera*. Apical cell closed, costal spine rather small.

Differs from *Pseudatractocera* as follows: Epistoma shorter and broader. Front less prominent. Parafacials narrower, bare. Hind crossvein nearly in middle between small crossvein and bend of fourth vein. Also in frontal and discalmacrochæta characters given above.

It may be noted here that Viviania georgiæ B. B. is a Pseudatractocera.

Ypophæmyia, new genus.

Genotype, Ypophamyia malacosoma, new species.

Differs from Miaminyia as follows: Male vertex wider than one eye, front and face gradually widening therefrom. Frontalia a little narrower than parafrontals. Female front a little broader than that of male. Parafacials and cheeks broad in both sexes. Antennæ enlarged in male, shorter in female. Female with two proclinate fronto-orbitals, male without such. Three lateral scutellar bristles, a short suberect decussate apical pair, and a discal pair. Median marginal macrochætæ of first two abdominal segments weak or vestigial, the first segment practically without macrochætæ. Hind tibiæ rather closely pectinate in both sexes, one longer bristle near middle. Apical cell ending well before tip, open. Cubitus rounded-subangular, without stump or wrinkle. Hind crossvein as far from cubitus as its own length. First vein bare, third vein with a few bristles at base only.

Ypophæmyia malacosomæ, new species.

Length of body, 6 to 7 mm.; of wing, 4.5 to 5.5 mm. Three males and one female, Raleigh, North Carolina, reared by Mr.

R. W. Leiby from pupæ of *Malacosoma americana* (Expt. No. 50-1).

Differs in coloration from description of *Meigenia websteri* Towns., 1891, Can. Ent., XXIII, 206-7, only as follows: Third antennal joint of female very largely reddish, that of male wholly black. Scutellum quite blackish, with only faint indication of lighter on margin. Blackish hind margin of intermediate abdominal segments very narrow.

Holotype, Cat. No. 20308, U. S. Nat. Mus., male.

A female specimen which I determine as websteri T. agrees with description, except that third antennal joint is broadly reddish basally, and appears to be congeneric. In fact, malacosomæ may prove to be only a subspecies of websteri.

This form is very apt to be confused with Masicera pauciseta Coq., 1897, Rev. Tach., 114, type of Masiceropsis T., and perhaps only a subspecies of Phorocera promiscua Towns., 1891, Psyche, VI, 84-5. It differs from Masiceropsis by broader front, longer antennæ of female, no well-developed macrochætæ on first abdominal segment, apical crossvein approximated to hind border of wing, hind crossvein farther from bend of fourth vein; and anal segment without true discals, but with only submarginal or subdiscal macrochætæ.

Euzenilliopsis, new genus.

Genotype, Eusenilliopsis diatraa, new species.

Differs from Euzenillia as follows: Male without proclinate fronto-orbitals; male front on posterior half about three-fourths of one eye in width. No discal macrochætæ on intermediate abdominal segments in either sex. Apical cell very narrowly open, almost closed.

Euzenilliopsis diatrææ, new species.

Length of body, 5 to 6 mm.; of wing, 3.75 to 4 mm. Four males and three females reared by Mr. U. C. Loftin in Cuba from larvæ of *Diatræa saccharalis*, 1915; and one male, Audubon Park, Louisiana, issued January 25, 1916, from pupa found in cane December 8, 1915.

Face, front, cheeks, and occiput silvery, the parafrontals with a very faint tinge of brassy. Antennæ and frontalia wholly blackish. Palpi light fulvous. Thorax silvery, with four black vittæ, of which the outer ones are heavier and in-Abdomen largely fulvous, sometimes in male terrupted. wholly so except tergum of anal segment; a more or less distinct median vitta of darker; the vitta may spread out in black on hind margin of second segment in male, and cover all of third and anal segments, with silvery pollen on basal half of intermediate segments and nearly all of anal segment, the silvery dotted with black at origins of hairs. Female abdomen with more black as a rule; the base and sides of tergum more or less broadly fulvous, the venter fulvous on basal half or so. Legs blackish. Wings very lightly smoky. Tegulæ whitish, the hind scale of male lightly infuscate on posterior half.

Holotype, Cat. No. 20309, U. S. Nat. Mus., male, Audubon Park, Louisiana.

Schizocerophaga, new genus.

Holotype, Schizocerophaga leibyi, new species.

Differs from *Doryphorophaga* as follows: Male without proclinate orbitals. Eyes bare in both sexes. Female front nearly twice as long as wide. Ocellar bristles stronger. Parafacials and parafrontals not so wide. Facialia ciliate on lower one-third or so. No discal macrochætæ on intermediate abdominal segments in either sex. Apical cell widely to narrowly open a little before tip of wing. Tegulæ not enlarged.

From Hylotomomyia it differs by the parafacials being narrow and not hairy and the discals absent as above stated. From Tachinophyto it differs by the male being without proclinate orbitals, the front narrower, etc.

Schizocerophaga leibyi, new species.

Length of body, 5 to 7 mm.; of wing, 3.5 to 4.75 mm. Two males and three females, Raleigh, North Carolina, reared by Mr. R. W. Leiby from pupe of *Schizocerus privatus* Norton, July 31, 1915 (Expt. No. 61-6).

Head silvery-white, antennæ and frontalia black, parafrontals golden on inner posterior border; palpi fulvous. Thorax black, silvery pollinose; mesoscutum and scutellum with brassy tinge; four black vittæ. Abdomen black, shining except the silvery basal half of last three segments. Legs black. Wings clear. Tegulæ whitish.

Holotype, Cat. No. 20310, U. S. Nat. Mus., female.

A NEW PLECTROTHRIPS (THYSANOPTERA) FROM JAMAICA

By J. DOUGLAS HOOD

The genus *Plectrothrips* was erected by the author in 1908 for a new species of unknown habits taken in Illinois on a woodshed window. It was not known whether the specimens, of which there were seven, had flown onto the window during the warm sultry afternoon or whether they had come from the wood in the shed itself, about as many specimens having been found on the outside as on the inside of the window.

One year later, Mr. Bagnall made known a species of *Plectrothrips* from the Isle of Nias, in the Malay Archipelago, basing his description on a unique specimen without further data.

The third species of the genus, which is here described as new, is so closely related to the other two as to leave but little doubt that the habits of all are the same, and directly responsible for the interesting structural characters of the genus. The Jamaican species was taken in the burrows of a Cerambycid beetle in the wood and cambium of Pimento by Mr. Archibald H. Ritchie, Government Entomologist for Jamaica, to whom I am indebted for the types.

Plectrothrips pallipes, new species. (Pl. I, figs. 1-4.)

Female (macropterous).—Length about 1.4 mm. Color blackish brown, fading to brownish orange on abdomen; legs uniform orange yellow; segments 2 and 3 of antennæ largely yellow; fore wings yellowish at base.